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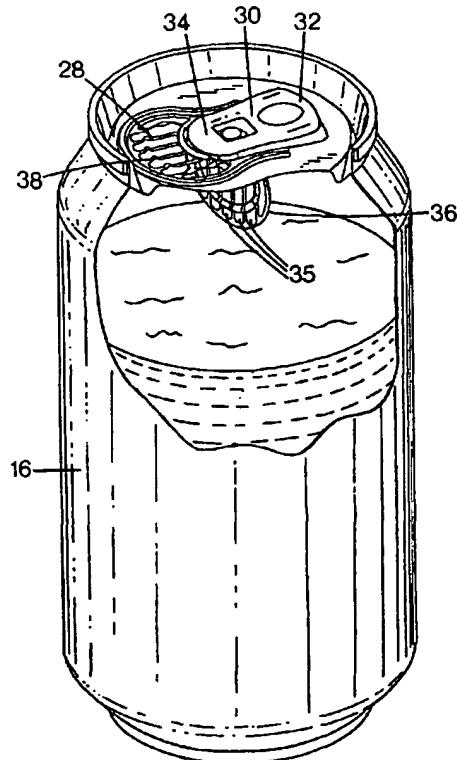
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(54) Title: METHOD FOR PROTECTING BEVERAGE CAN FROM INSECTS



(57) **Abstract:** The method is for preventing insects from entering an opening of a beverage can. The method provides for a beverage can (16) that has a lever member (30) with a handle member (32) and an engaging member (34) attached to a top surface (12) of the beverage can (16). A cover member (10) is placed on top of the top surface (12) so that a protection area (27) is placed above a weakened segment (36) of the top surface (12) and an inner opening segment (24) is placed below the engaging member (34). The protection area (27) has a plurality of precut segments (35). With the protection area (27) and the segments (35) placed on top of the weakened segment (36), the handle member (32) is lifted to move the engaging member (34) through the inner opening segment (24) to push a portion of the weakened segment (36) with the segments (35) glue thereto into the beverage can (16) and creating an opening (38) that is covered by the apertures (28) of the protection area (27) to prevent insects from getting into the can (16).

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B65D 17/00, B65D 17/34
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B65D, A47G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 19942013 A1 (WIDMANN, ACHIM), 8 March 2001 (08.03.2001), figure 3 --	1-8
A	GB 2304673 A (KENNETH GEORGE BARNES), 26 March 1997 (26.03.1997), figure 5, abstract --	1-8
A	US 5547100 A (JOHNSON), 20 August 1996 (20.08.1996), figures 3,4 --	1-8
A	US 5720412 A (FICKEN), 24 February 1998 (24.02.1998), figures 1-10 --	1-8

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See patent family annex.

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PCT/SE 2003/001789

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5775534 A (WEBB ET AL), 7 July 1998 (07.07.1998), figures 1-23 --	1-8
A	US 5887742 A (LEWIS), 30 March 1999 (30.03.1999), figures 1,2 --	1-8
A	WO 9308087 A1 (WALDBAUR, WILFRIED), 29 April 1993 (29.04.1993), figures 5-10 --	1-8
A	WO 0112513 A1 (JONSCHER, RAINER), 22 February 2001 (22.02.2001), figures 1-8 --	1-8
A	WO 0206126 A2 (OETTING, ELVIRA), 24 January 2002 (24.01.2002), page 9, line 13 - line 32, figures 4, 5 -----	1-8

INTERNATIONAL SEARCH REPORT
Information on patent family members

24/12/2003

International application No.	
PCT/SE 2003/001789	

DE	19942013	A1	08/03/2001	NONE		
GB	2304673	A	26/03/1997	GB	2306937	A 14/05/1997
				GB	9518568	D 00/00/0000
				GB	9522719	D 00/00/0000
US	5547100	A	20/08/1996	NONE		
US	5720412	A	24/02/1998	NONE		
US	5775534	A	07/07/1998	AT	215477	T 15/04/2002
				AU	7633196	A 19/06/1997
				DE	69620444	D,T 05/09/2002
				EP	0865385	A,B 23/09/1998
				GB	9524099	D 00/00/0000
				GB	9600640	D 00/00/0000
				GB	9602263	D 00/00/0000
				WO	9719861	A 05/06/1997
				EP	0764009	A 26/03/1997
				EP	0862479	A 09/09/1998
				JP	2000511065	T 29/08/2000
				US	6074380	A 13/06/2000
US	5887742	A	30/03/1999	NONE		
WO	9308087	A1	29/04/1993	AU	1559492	A 21/05/1993
WO	0112513	A1	22/02/2001	AU	7641800	A 13/03/2001
				DE	19942827	A 01/03/2001
				DE	29924177	U 04/07/2002
				EP	1204559	A 15/05/2002
WO	0206126	A2	24/01/2002	AU	8967601	A 30/01/2002
				DE	20012410	U 07/12/2000